



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,065	08/04/2003	Alan R. Watson	GEN10 P-351A	5540

28469 7590 06/02/2005

PRICE, HENEVELD, COOPER, DEWITT, & LITTON,
LLP/GENTEX CORPORATION
695 KENMOOR, S.E.
P O BOX 2567
GRAND RAPIDS, MI 49501

EXAMINER

GRIER, LAURA A

ART UNIT	PAPER NUMBER
----------	--------------

2644

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,065

Applicant(s)

WATSON ET AL.

Examiner

Laura A. Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-9,11,13,19,22-24,26,29-31,33 and 35 is/are rejected.
- 7) ☒ Claim(s) 2,5,10,12,15-18,20,21,25,27,28,34 and 36 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/4/03</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8/4/03 has been considered by the examiner.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. **Claims 1, 4, 6, 8, 19, 22-23, 25 and 29-31, 33-35** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15-16, 19, and 21-24 of copending Application No. US2004020833. Although the conflicting claims are not identical, they are not patentably distinct from each other because both are drawn to microphone mounted in a vehicle accessory.

Regarding **claim 1**, Pub. No.: US20040208334 (herein, US-8334) disclose in claims 15, 16, 19 and 21 a mirror housing with a mirror mounted in the mirror housing, which reads on a

Art Unit: 2644

mirror housing and a mirror; a 1st microphone transducer and a 2nd microphone transducer (claim 15), which reads on a 1st and 2nd transducer, with a 1st microphone housing for mounting the 1st microphone transducer and a 2nd microphone housing for mounting the 2nd microphone transducer (claim 16) and the 1st and 2nd microphone housing each have ports (claim 19), which reads on a 1st and 2nd microphone housing, and wind screen across at least one 1st port (claim 21), wherein it obvious to provide a windscreen across the other port.

Regarding **claim 19**, US-8334 discloses in claims 15, 16, 19 and 21 a mirror housing with a mirror mounted in the mirror housing, which reads on a housing adapted for mounting to a vehicle, a 1st microphone transducer and a 2nd microphone transducer (claim 15), which reads on a 1st and 2nd transducer, with a 1st microphone housing for mounting the 1st microphone transducer and a 2nd microphone housing for mounting the 2nd microphone transducer (claim 16) and the 1st and 2nd microphone housing each have ports (claim 19), which reads on a 1st and 2nd microphone housing, and wind screen across at least one port (claim 21), wherein it obvious to provide a windscreen across the other port.

Regarding **claims 23 and 30-31**, respectively, US-8334 discloses in claims 15, 16, 19 and 21, a rearview mirror with a mirror housing with a mirror mounted in the mirror housing, a 1st microphone transducer and a 2nd microphone transducer (claim 15) with a 1st microphone housing for mounting the 1st microphone transducer and a 2nd microphone housing for mounting the 2nd microphone transducer (claim 16) and the 1st and 2nd microphone housing each have ports (claim 19), and wind screen across at least one port (claim 21), wherein it obvious to provide a windscreen across the other port, which reads on the claimed limitations, therein.

Regarding **claims 4, 22 and 29**, respectively, US-8334 discloses in claim 23 the acoustic resistivity of the windscreen at least about $1 \Omega/\text{cm}^2$, which reads on the windscreens having an acoustic resistivity of the windscreen at least about $1 \Omega/\text{cm}^2$.

Regarding **claims 6, 23 and 35**, US-8334 discloses in claim 22 the windscreen is sealed across at least one 1st port and has hydrophobic properties, which reads on the windscreens been sealed and having hydrophobic properties.

Regarding **claim 8**, US-8334 discloses in claim 24 1st and 2nd circuit boards for the 1st and 2nd microphone transducers, which reads on the 1st and 2nd circuit boards for the 1st and 2nd transducer.

Regarding **claims 25 and 34**, respectively, US-8334 discloses in claim 24 1st and 2nd circuit boards for the 1st and 2nd microphone transducers, which reads on the 1st and 2nd circuit boards for the 1st and 2nd transducer.

4. **Claim 9** is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15, 16, 19 and 21 of copending Application No. US-8334 in view of DeLine et al., U. S. Patent No. 6717524.

Regarding **claim 9**, US-8334 discloses everything claimed as applied above (see claim 1). However, US-8334 fails to disclose the mirror as an electrochromic mirror.

In a similar field of endeavor, Deline et al. (herein, Deline) disclose a rearview mirror wherein the mirror is an electrochromic mirror (col. 6, lines 26-31).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of US-8334 by providing an electrochromic mirror for purpose improving the performance of the mirror.

This is a provisional obviousness-type double patenting rejection.

5. **Claims 1, 19 and 26** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 42-43 and 45 of U.S. Patent No. 6882734. Although the conflicting claims are not identical, they are not patentably distinct from each other because both are drawn to microphone mounted in a vehicle accessory.

Regarding **claims 1, 19 and 26**, U.S. Patent No. 6882734 discloses in claims 42-43 and 45 a vehicle accessory housing including a rearview mirror assembly, wherein it is obvious that a mirror is mounted therein, a 1st and 2nd transducers within a 1st and 2nd housings, each with acoustic ports and windscreens, which reads on the claimed limitations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 1, 3, 6, 7, 9, 11, 13-14, 19, 23 and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Deline et al. in view of Gabr, U. S. Patent No. 3995124 and further in view of Julstrom et al., U. S. Patent No. 6560344.

Regarding **claims 1, 6, 11, 13, 19, and 23**, Deline discloses mirror-based audio system for a vehicle. Deline's disclosure comprises a microphone module/housing (10/18) and rearview mirror housing assembly (including an electrochromic mirror), wherein the microphone housing may be housed within or on, respectively, the housing of the rearview mirror 16b (abstract, figures 1, 2 and 3 col. 11, lines 61-67 and col. 12, lines 1-29 and 54-56) and further indicates that multiple microphones can be positioned in the microphone module for various applications, which is indicative of mirror subassembly including a mirror housing, and a 1st and 2nd transducer being positioned in the microphone housing. However, Deline fails to provide transducers housing with ports and windscreens, therein as claimed.

Regarding the transducers in the housing and having ports, in a similar field of endeavor, Gabr discloses a noise canceling microphone comprising a tubular housing (12) for housing two electro-acoustic transducers (14/16) – 1st and 2nd transducers - mounted on annular partitions (22), respectively in two chambers (1st and 2nd transducer housings), in a forward position via the chambers which provide support for acoustic ports (1st and 2nd) - (figure 1 - abstract, col. 2, lines 12-21, 28-37, 52-64). Gabr indicates that the invention (the noise cancellation microphone) may be provided in various shapes or housings.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Deline by incorporating the transducers

Art Unit: 2644

positioned in a housing, therein, for the purpose of providing adequate noise cancellation and/or reduction of a system as desired.

However, Deline and Gabr fail to disclose windscreens. Regard the windscreen(s), Julstrom et al. (herein, Julstrom) discloses a directional microphone assembly. Julstrom's disclosure comprises a microphone (col. 4, lines 46-51 or col. 8, lines 58-64, col. 9, lines 9-30) consisting of windscreens across the sound inlets ports.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Deline and Gabr by providing windscreens across the ports for the purpose of controlling what particles passes through the sound ports or inlets, such dirt, liquids (water) and against the wind.

Regarding claim 14, Deline, Gabr and Julstrom (herein, Deline combination) disclose everything claimed as applied above (see claim 13). Gabr discloses (figure 1) the 1st and 2nd transducers housed, respectively, wherein, with modification of Julstroms's windscreen is obvious that the transducers (1st and 2nd, respectively) would be spaced apart from the windscreens.

Regarding claim 24, Deline combination discloses everything claimed as applied above (see claim 23). Gabr further discloses a baffle (24) which separates the two chambers, each housing transducer (figure 1), which reads on a mechanical structure.

Regarding claim 3, Deline combination discloses everything claimed as applied above (see claim 1). Julstrom discloses the use of the windscreens protect as unwanted properties and particles that causes acoustical interference, thus obviously providing compensation for the sensitivities of the mirror (col. 12, lines 1-29 and 54-56).

Regarding claim 7, Deline combination discloses everything claimed as applied above (see claim 1). Gabr further discloses a baffle (24) which separates the two chambers, each housing transducer (figure 1), which reads on a mechanical structure.

8. **Claims 26, 33, and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gabr in view of Julstrom.

Regarding claims 26 and 35, Gabr discloses a noise canceling microphone comprising a tubular housing (12) housing (12) for housing two electro-acoustic transducers (14/16) – 1st and 2nd transducers - mounted on annular partitions (22), respectively in two chambers (1st and 2nd transducer housings), in a forward positions via the chambers which provide support for acoustic ports (1st and 2nd) - (figure 1 - abstract, col. 2, lines 12-21, 28-37, 52-64). Gabr indicates that the invention (the noise cancellation microphone) may be provided in various shapes or housings. However, Gabr fail to disclose windscreens. Regard the windscreen(s), Julstrom discloses a directional microphone assembly. Julstrom's disclosure comprises a microphone (col. 4, lines 46-51 or col. 8, lines 58-64, col. 9, lines 9-30) consisting of windscreens across the sound inlets ports.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Gabr by providing windscreens across the ports for the purpose of controlling what particles passes through the sound ports or inlets, such dirt, liquids (water) and against the wind.

Regarding claim 33, Gabr and Julstrom discloses everything claimed as applied above (see claim 26). Gabr further discloses a separation means for the two chambers, each housing transducer (figure 1), which reads on a mechanical structure.

Regarding claims 30-32, Gabr and Julstrom discloses everything claimed as applied above (see claim 26). Gaber indicates that the invention (the noise cancellation microphone) may be provided in various shapes or housings. However, Gabr and Julsttrom fail to discloses the a housing with a microphone housing and mirror housing.

Regarding the microphone and mirror housing, Deline discloses mirror-based audio system for a vehicle. Deline's disclosure comprises a microphone module/housing (10/18) and rearview mirror housing assembly, wherein the microphone housing may be housed within or on, respectively, the housing of the rearview mirror 16b (abstract, figures 1, 2 and 3 col., 11, lines 61-67 and col. 12, lines 1-29 and 54-56), which indicates a housing with a microphone housing and mirror housing.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Gabr and Julstrom by implementing a housing for a microphone and mirror housing for the purpose of providing efficient noise control with a noise environment.

Regarding claim 32, Gabr, Julstrom and Deline (Gabr combination) disclose everything claimed as applied above (see claim 31). Julstrom discloses the use of the windscreens protect as unwanted properties and particles that causes acoustical interference, thus obviously providing compensation for the sensitivities of the mirror (col. 12, lines 1-29 and 54-56).


9. Claims 2, 5, 10, 12, 15,-18, 20-21, 25, 27-28, 34 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N. Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura A. Grier
May 30, 2005